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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,965	12/05/2001	Michael Baumann	P67239US0	1378

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EXAMINER

DRODGE, JOSEPH W

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,965

Applicant(s)

BAUMANN, MICHAEL

Examiner

Joseph W. Drodge

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0402 . 6) ☐ Other: .

Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, antecedent basis is lacking for "the valve".

In claim 5, clear antecedent basis is lacking for "the back pressure regulator".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1,2,6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorn et al patent 4,980,057 in view of Browner et al patent 4,629,478.

Dorn et al and Browner et al both involve systems which couple chromatographic separators, production of aerosols for analysis and downstream mass spectrometer detectors. Dorn et al disclose chromatographic separator (column 3, line 50) [as in claim 7], vacuum unit for evaporating and concentrating 20/24/18 (see column 5, lines 49-58) and device for preventing flow rates through the separator being affected by the vacuum in the form of a capillary restrictor (column 4, line 34-42 and 52-68).

The claims differ in requiring conveyor (pump) and metering means. Browner et al teach such pump 10 [as in claim 2] and metering means 11/13 constituting tubing (i.e. "hose", see column 7, lines 57-60) [as in claim 6]. It would have been obvious to one of ordinary skill in the art to have utilized the pump type conveyor and metering means of Browner et al in the Dorn et al system, in order to maintain a precise, high volume flow through the chromatograph and between chromatograph and spectrometer (see discussion of column 2, lines 65-70 of Browner et al for such motivation).

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorn et al in view of Browner et al as applied to claims 1 and 2 above, and further in view of Walters et al patent 6,086,767.

Claims 3-5 further differ in requiring the means for preventing to be a valve, or specifically a back-pressure regulator type valve. Walters et al teach a plurality of types of such back pressure regulator restrictor valves in column 27, line 61-column 30, line 65, and figures 8, 13 and 15, etc. It would have been obvious to one of ordinary skill in the art to have further modified the Dorn et al system by substituting a back pressure regulator in the form of a variable orifice valve instead of the disclosed capillary restrictor, as taught by Walters et al, to optimize timing and volume of sample movement and prevent necessity of wasting and discarding sample volumes.

Regarding claim 5, Walters et al teach various forms of sealing, spring mechanisms and set screw and other actuators in the embodiments of figures 8, 13 and 14.

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Any inquiries concerning this Office Action or other matters pertaining to prosecution of this application should be directed to Examiner Joseph Drodge at telephone number (571) 272-1140 Monday-Friday between the hours of 8:45 AM and 4:45 PM. The Fax number for the Examining Group is (703) 872-9306.

JWD

December 19, 2003


JOSEPH DRODGE
PRIMARY EXAMINER